

Application/Control Number: 10/067,433

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W.M.

03/08/05

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1. (Previously Presented) A portable battery operated ionizer comprising:

- a) an electrical circuit adapted to be powered by a low-voltage current supplied by a battery;**
 - b) an oscillator circuit within the electrical circuit for being powered by the low-voltage current supplied by the battery, said oscillator circuit being connected to a voltage conversion circuit to provide an ionizing voltage to an output capacitor means;**
 - c) an ion-emitter connected to receive charge from the voltage conversion circuit and output capacitor means, said ion-emitter being exposed for possible direct manual contact by a user and for release of ions into the surrounding environment ; and**
 - d) electrode connection means to provide for a counter-electrode to be connected to said electrical circuit, to induce the emission of ions from the ion-emitter,**
- wherein said oscillator produces intermittent oscillations such that the voltage established at the output capacitor means is an ionizing voltage and wherein, ion emission continues from said ion-emitter during the time the oscillator is not producing oscillations, supplied by charge from the output capacitor means.**

2. (Canceled)

3. (Previously Presented) An ionizer as in claim 1 wherein the voltage conversion circuit comprises a high voltage step-up transformer and the output capacitor means comprises a diode-capacitor multiplier network driven by the transformer for producing said ionizing voltage.

4. (Canceled)

5. (Canceled)

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6. (Previously Presented) An ionizer as in claim 1 wherein said electrode connection means comprises a conductive connection means whereby an external body may become electrically connected to said electrical circuit to serve as at least part of the counter-electrode.

7. (Previously Presented) An ionizer as in claim 6 wherein said conductive connection means is a conductive strap that supports the ionizer as a pendant for attachment to a human being as the external body.

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Currently amended) A battery-operated, portable ionizer comprising:

- a) an electrical circuit adapted to be powered by a low-voltage current supplied by a battery;
- b) an oscillator circuit within the electrical circuit for being powered by the low-voltage current supplied by the battery;
- c) a voltage conversion circuit connected to the oscillator circuit to provide an ionizing voltage to an output capacitor means;
- d) an ion-emitter connected to receive charge from the voltage conversion circuit and output capacitor means and provide ion-emission, said ion-emitter being exposed, when in use, for release of ions into the open air, and
- e) a conductive connection means whereby an external body may become electrically

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connected to said electrical circuit to serve as, at least, part of a counter-electrode to induce emission of ions by the ion-emitter.

13. (Previously Presented) An ionizer as in claim 12 wherein said conductive connection means is a conductive strap that supports the ionizer as a pendant for attachment to a human being as the external body.

14. (Previously Presented) An ionizer as in claim 12 wherein the voltage conversion circuit comprises a diode-capacitor multiplier network driven by a transformer for producing said ionizing voltage, and said diode-capacitor multiplier network comprises said out put capacitor means.

15. (Previously Presented) An ionizer as in claim 13 wherein the voltage conversion circuit comprises a diode-capacitor multiplier network driven by a transformer for producing said ionizing voltage, and said diode-capacitor multiplier network comprises said out put capacitor means.

16. (Previously Presented) An ionizer as in claim 12 comprising intermittent oscillator control means whereby said oscillator produces intermittent oscillations such that the voltage established at the output capacitor means is an ionizing voltage and wherein said ion emission continues during the time the oscillator is not producing oscillations, supplied by charge from the output capacitor means.

17. (Currently amended) An ionizer as in claim 13 comprising intermittent oscillator control means whereby said oscillator produces intermittent oscillations such that the voltage established at the output capacitor means provides said ionizing voltage while oscillations are occurring, ~~and~~ and wherein said ion emission continues during the time the oscillator is

not producing oscillations, supplied by charge from the output capacitor means.

18. (Previously Presented) An ionizer as in claim 14 comprising intermittent oscillator control means whereby said oscillator produces intermittent oscillations such that the voltage established at the output capacitor means provides said ionizing voltage while oscillations are occurring, and wherein said ion emission continues during the time the oscillator is not producing oscillations, supplied by charge from the output capacitor means.

19. (Previously Presented) An ionizer as in claim 15 comprising intermittent oscillator control means whereby said oscillator produces intermittent oscillations such that the voltage established at the output capacitor means provides said ionizing voltage while oscillations are occurring, and wherein said ion emission continues during the time the oscillator is not producing oscillations, supplied by charge from the output capacitor means.

20. (Previously Presented) An ionizer as in claim 16 wherein the oscillator, when it is not producing oscillations, is not producing oscillations for up to ten times as long as when the oscillator is producing oscillations.

21. (Previously Presented) An ionizer as in claim 17 wherein the oscillator, when it is not producing oscillations, is not producing oscillations for up to ten times as long as when the oscillator is producing oscillations.

22. (Previously Presented) An ionizer as in claim 18 wherein the oscillator, when it is not producing oscillations, is not producing oscillations for up to ten times as long as when the oscillator is producing oscillations.

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23. (Previously Presented) An ionizer as in claim 19 wherein the oscillator, when it is not producing oscillations, is not producing oscillations for up to ten times as long as when the oscillator is producing oscillations.

24. (Currently amended) A battery-operated, portable ionizer comprising:

- a) an electrical circuit adapted to be powered by a low-voltage current supplied by a battery;
- b) an oscillator circuit within the electrical circuit powered by the low-voltage current supplied by the battery;
- c) a voltage conversion circuit connected to the oscillator circuit to provide an ionizing voltage to an output capacitor means;
- d) an ion-emitter connected to receive charge from the voltage conversion circuit and output capacitor means, said ion-emitter being exposed, when in use, for release of ions into the open air, and
- e) a conductive connection means whereby a human body may become electrically connected to said electrical circuit to serve as a counter-electrode to induce emission of ions by the ion-emitter.

25. (canceled)

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26. (Previously Presented) An ionizer as in claim 24 wherein the voltage conversion circuit comprises a diode-capacitor multiplier network driven by a transformer for producing said ionizing voltage, and said diode-capacitor multiplier network comprises said output capacitor means.

27. (Canceled)

28. (Previously Presented) An ionizer as in claim 24 comprising intermittent oscillator control means whereby said oscillator produces intermittent oscillations such that the voltage established at the output capacitor means provides said ionizing voltage while oscillations are occurring, and wherein said ion emission continues during the time the oscillator is not producing oscillations, supplied by charge from the output capacitor means.

29. (Canceled)

30. (Previously Presented) An ionizer as in claim 26 comprising intermittent oscillator control means whereby said oscillator produces intermittent oscillations such that the voltage established at the output capacitor means provides said ionizing voltage while oscillations are occurring, and wherein said ion emission continues during the time the oscillator is not producing oscillations, supplied by charge from the output capacitor means.

31. (Canceled)

32. (Previously Presented) An ionizer as in claim 28 wherein the oscillator, when it is not producing oscillations, is not producing oscillations for up to ten times as long as when the oscillator is producing oscillations.

33. (Canceled)

34. (Previously Presented) An ionizer as in claim 30 wherein the oscillator, when it is not producing oscillations, is not producing oscillations for up to ten times as long as when the oscillator is producing oscillations.

35. (Canceled)